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First record of *Cranchia scabra* Leach, 1817 (Cephalopoda: Cranchiidae) in the Mediterranean Sea

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KEY WORDS: Cephalopoda, *Cranchia scabra*, first record, Balearic Islands, Mediterranean Sea.

ABSTRACT: The capture of a female specimen of *Cranchia scabra* Leach, 1817, a species not previously recorded in the Mediterranean Sea, is reported from Majorca (Balearic Islands, north-western Mediterranean).

RIASSUNTO: La pubblicazione si riferisce della cattura di una femmina di *Cranchia scabra* Leach, 1817, nei pressi di Maiorca (Isole Baleari, Mediterraneo nordoccidentale). La specie non era stata segnalata in precedenza nel Mediterraneo.

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INTRODUCTION

The cranchiids are one of the most important cephalopod families in number of species (Nesis, 1987; Voss, 1980; Voss *et al.*, 1992). Such a richness implies a high degree of morphological divetsity, that is increased by the presence of sexual dimorphism and great ontogenetic changes in the majotity of species. Moteover, many members of this family have been described by larval specimens only. All these factors explain the high confusion existing with the cranchiids and that the majority of the species are still undescribed (Voss *et al.*, 1992). It is obvious that this family, presently constituted by 13 genera and more than 60 species (Voss *et al.*, 1992), would undetgo important contributions by oncoming studies.

The cranchiids are characterized by the fusion of the mantle to the head at nuchal region and to the funnel at posterolatetal corners and by the presence of photophores in the eyes. They are worldwide distributed from epipelagic to upper bathypelagic waters ftom the Subarctic to the Antarctic (Voss *et al.*, 1992). In the present note the occurrence of a member of this family, *Cranchia scabra* Leach 1817, is reported for the first time in the Mediterranean Sea. The species is the only Meditertanean member of the subfamily Cranchiinae.

MATERIAL, METHODS AND RESULTS

On March 25th 1998, a female specimen of *C. scabra* (Fig. 1) was caught in a haul cartied out by a commercial bottom ttawler fishing between 506 m and 769 m of depth in Majotcan waters (Baleatic Islands, north-western Meditertanean) between the co-ordinates 39° 15' 02" N – 02° 25' 40"E and 39° 04' 52"N – 02° 25' 29"E. The specimen was identified by external morphological chatacters (Voss, 1980; Voss *et al.*, 1992): mantle with scattered cross-shape tubercles; protruding, small oval eyes; small, paddle-shape fins; funnel large, broad, extending nearly to base of arms, surface papillated; short, nontuberculat, inverted V-shape cartilaginous strips extending postetiorly from antetiot apex of funnel-mantle fusions. It was not possible to determine the sexual condition of the specimen because of deteriorated internal organs.

After identification, morphomettic characters (Table 1) were measured to the nearest mm and the total weight was taken to the nearest 0.1 g. The beaks were extracted and upper rostral length (URL) and lower rostral length (LRL) wete measured to the nearest 0.1 mm using a dissecting microscope. The specimen was aftetwards preserved in 70% ethyl alcohol and deposited in the Centre Oceanogràfic de Balears collection with the numbet COB1/1998.

DISCUSSION

Cranchia scabra has a citcumglobal distribution, occurring in tropical and subtropical waters. The species is one of the commonest cranchiids (Clarke, 1966). Juveniles live in the upper 400 m but larger individuals inhabit deeper waters, being cited up to 2000 m depth (Voss *et al.*, 1992). In the Atlantic, *C. scabra* is carried in the current system into north temperate waters in the centtal and eastern ocean to at least 37°N (Voss, unpublished data). Considering the fact that juveniles occut in the upper ocean layers, they may be expected to be occasionaly ttansported into the Mediterranean Sea (Voss, pers. comm.).

The cranchiids are pootly reptesented in the Mediterranean, since only three other species have been reported up to date (Bello, 1986; Mangold and Boletzky, 1988). One of these species, *Galiteuthis armata* Joubin 1898, although it is not very frequent, has been caught throughout this sea. Another one, *Teuthowenia megalops* (Prosch 1849), was firstly tecorded by Sànchez (1985) in the north-western Mediterranean and it was subsequently found in the stomach contents of a *Globicephala melaena* Traill 1809, sttanded on the French coast of this sea (Bello, 1992). More recently, Bello and Biagi (1999) reported the occurtence of a vety large Taoniine cranchiid squid, belonging to either *Galiteuthis* or, more probably, *Megalocranchia*.

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	mm
Mantle length	102
Maximum mantle width	59
Arm length I	35
Arm length II	47
Arm length III	69
Arm length IV	46
Tentacle length	183
Tentacle club length	20
Base of the fin	13
Maximum fin width	17
Head width	32
Eye diameter	17
Total weight (g)	26.0
N° photophores in the eye	14
Upper rostral length (URL)	2.0
Lower rostral length (LRL)	2.5

Table 1 – Morphometric and meristic data of the female specimen of *Cranchia scabra* caught in Majorcan waters (Balearic Islands, north-western Mediterranean Sea).

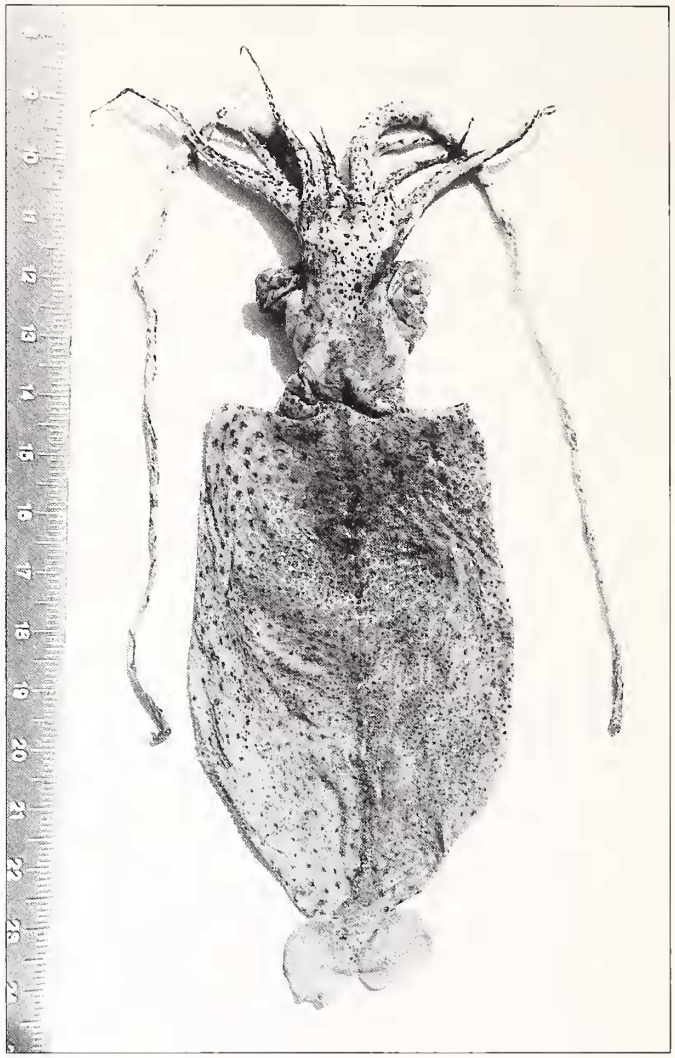

Fig. 1 – Female specimen of *Cranchia scabra* caught in Majorcan waters (Balearic Islands, north-western Mediterranean Sea).

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